

REMARKS

Claims 1-34 are pending. Claims 1-34 are variously rejected in an Office Action dated February 12, 2001 under 35 U.S.C. §§102, 103, and 112. In reply, Applicants amend claims 1, 9, 19, 25, 27, and 28 and submit the present remarks. Reconsideration and allowance of the application are requested.

Objections to the Reissue Application

In paragraph one of the outstanding Office Action, the Examiner states that the present reissue application was filed without the required offer to surrender the original patent or a statement of loss or inaccessibility thereof. The Examiner requests the original patent or such statement in accordance 37 C.F.R. § 1.178.

In reply, Applicant submits that the present reissue application does in fact include an offer to surrender in compliance with §1.178 and, thus, the Examiner's contention is unfounded.

Section 1.178 states that an application for reissue "*should* be accompanied by *either* an offer to surrender the original patent, *or* the original patent itself, *or* if the original is lost or inaccessible, by a statement to that effect." Emphasis added.

(right side) The originally filed reissue application includes an "Offer to Surrender and Assent of Assignee to Reissue". A copy of this Offer to Surrender is provided herewith as Attachment A. Also provided herewith as Attachment B is a copy of an acknowledgement postcard stamped by the Patent Office as being received on July 17, 2000. The Patent Office's acknowledgement of the postcard indicates submission and receipt of the Offer to Surrender.

Section 1.178 uses alternative language to request an offer to surrender, the original patent, or a statement of loss or inaccessibility. An offer to surrender has been provided. Thus, the provisions of §1.178 are clearly satisfied by the reissue application as filed. Reconsideration is requested.

The Declaration filed in the present reissue application has been rendered defective for allegedly failing to contain a statement that all errors which are being corrected in the reissue application arose without any deceptive intent on the part of Applicant, in compliance with 37 C.F.R. §1.175 and MPEP §1414.

In reply, the Examiner is directed to paragraph six (6) of the present Reissue Declaration in which Applicant states, "the error in claiming less that I had a right to claim (described and specified in Paragraph 5) arose *without any deceptive intent* on my part..." (emphasis added). It is submitted that this language clearly satisfies the provisions of 37 C.F.R. §1.175 and MPEP §1414. Reconsideration of the Declaration and withdrawal of the determination of defectiveness is respectfully requested.

Claims 1-34 are rejected as being based upon an allegedly defective reissue declaration. As discussed above the declaration is not defective. Accordingly, withdrawal of the rejection is requested.

Drawing Objections

The drawings are objected under 37 C.F.R. §1.84(p)(5) for failing to include all the reference signs as set forth in the specification. Particularly, the Examiner alleges that the drawings do not include reference sign "A" indicated at column 2, line 40 of the specification.

To address the Examiner's concerns, Figure 2 is amended as attached hereto to properly include reference sign "A". No new matter is added by way of the amendment to Figure 2 as antecedent support is found in the specification at column 2, lines 35-45 and in the originally filed Figure 2. Accordingly, withdrawal of the objection is requested.

The drawings are also objected to under 37 C.F.R. §1.83(a) for failing to show every feature of the invention specified in the claims. Particularly, the Examiner alleges that "the bar pusher being adapted to connect with a collet", as recited in claim 8, is not shown in the drawings.

In response, Applicant submits the drawings as filed satisfy §1.83 and thus the objection is improper and may not be maintained.

Section 1.83(a) of the Code states in part that “conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation...” Emphasis added.

Applicant herein submits that a “collet” and, an element, such as a “bar pusher”, being adapted to connect with the collet are conventional features of which the illustration is not essential for a proper understanding of the invention. Thus, the original drawings comply with §1.83(a) and, accordingly, the objection is improper and may not be maintained.

A collet is known to those of ordinary skill in the art to be a conventional means for gripping a shaft or rod in machining applications such as those described in the present application. Adaptation of an element to connect to such a collet is, therefore, also known to those of ordinary skill in the art. Section 1.83(a) indicates that such conventional features, not essential for a proper understanding of the invention, *should* be illustrated. It is noted that the Code does not require illustration of such conventional features. Thus, the drawings as filed are complete and satisfy the provisions of §1.83(a). Reconsideration and withdrawal of the outstanding objection to the drawings is requested.

Rejections Under 35 U.S.C. §112

Claims 1-34 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With regard to claim 1, the Examiner takes issue with the phrase, “guiding means”, recited on line 6. In reply, Applicant herein amends Claim 1 to address the Examiner’s concerns and submits that claim 1, as amended, complies with the provisions of §112. Also, claims 2-7 now comply with §112 as these claims variously depend from amended claim 1.

Accordingly, claims 1-7 are not indefinite, particularly point out and distinctly claim the subject matter which Applicant regards as the invention, and otherwise comply with §112, thus reconsideration and withdrawal of the outstanding rejections is requested.

Regarding claims 8, 19, 25, 27, and 28, the Examiner raises various issues of improper antecedent basis. In reply, Applicant herein amends claims 8, 19, 25, 27 and 28 and submits that these claims, as amended, comply with the provisions of §112. Also, claims 9-18, 20-24, 26, and 29-34 now comply with §112 as these claims variously depend from amended claims 8, 19, and 27.

Accordingly, claims 8-34 are not indefinite, particularly point out and distinctly claim the subject matter which Applicant regards as the invention, and otherwise comply with §112, thus reconsideration and withdrawal of the outstanding rejections is requested.

Rejections Under 35 U.S.C. §103

Claims 1, 2, 8-11, 15-21, and 25-31 are rejected under 35 U.S.C. §103(a) as being obvious over United States Patent No. 5,320,008 to Cucchi (herein, Cucchi) in view of United States Patent No. 3,612,298 to Azuma (herein, Azuma).

The Examiner contends that Cucchi discloses the claimed invention except for grip elements to grip a bar and the bar being released by the grip elements after inserting the bar in a collet. For this element, the Examiner relies upon Azuma and states that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cucchi to include the grip elements of Azuma. Thus, the Examiner concludes that Applicant's invention is rendered obvious over Cucchi in view of Azuma.

With respect to claim 1, Applicant submits that the obviousness rejection under §103 is improper and may not be maintained because the relied upon references, singularly or in combination, do not teach or suggest each and every limitation of the claimed invention. Particularly, Cucchi and Azuma, individually or in combination, fail to teach or suggest a guiding mechanism having slidably mounted thereon supporting elements and a carriage with gripping elements, the carriage being slidable on the guiding means between an initial gripping position and a final ungripping position, as recited by Applicant in claim 1.

Turning now generally to the present disclosure, Applicant describes therein a device for the advancement of bars in automatic loaders including, in one embodiment as shown in Figures 1-7, uprights 2 and 3 connected by horizontal parallel rods 4 and 5. Slidably mounted on the rods are a carriage 6 and supports 22, 23. The carriage includes

an assembly (reference numerals 7-16) for gripping a bar 17 and is slidably translatable along the rods by means of a chain 19. The supports are connected to one another by tie rods 24 and are slidably translatable along rods 4 and 5 so as to be capable of stacking proximate the upright 2 when the carriage is translated in a direction toward upright 2 and capable of distributing along the length of the rods when the carriage is translated in the direction of upright 3.

The device further includes a bar pusher assembly having shoulders 35 protruding from uprights 2 and 3 and a guide 36 for a chain 37 disposed between the shoulders. The guide is rotatable with respect to the shoulders and includes a longitudinal slot through which a flap 38 protrudes. The flap is rigidly coupled axially to the chain, is rotatable thereabout, and is connected to a bar pusher outfitted with a collet to grip the bar 17. The guide oscillates by means of a jack 43 allowing the bar pusher to be raised or lowered. The bar pusher is translatable along the guide by action of the chain.

Turning now to claim 1, Applicant recites a device for the advancement of bars including, among other elements, a guiding mechanism, whereon supporting elements to support a bar released from an automatic loading system and a carriage provided with grip elements for the bar, are slideable, the carriage being actuated between an initial position, where said grip elements are actuated so as to grip the bar deposited on the supporting element, and a final position, where the bar is released by the grip elements, after inserting the bar in a collet. At least these elements of Applicant's claim 1 are not taught or suggested by the relied upon references.

As mentioned, the Examiner states that Cucchi teaches the claimed invention except for grip elements to grip the bar and the bar being released by the grip elements after inserting the bar in the collet. The Examiner specifically contends that a guiding means 14 and a carriage 15, 17, 20 of Cucchi are analogous to the guiding means and carriage of Applicant's claim 1. However, as is evident from Figures 1-7 of Cucchi and the corresponding text, the guiding means 14 does not include slidable supporting elements thereon nor a slidable carriage with gripping elements, as recited by Applicant. Further, the carriage 15, 17, 20 of Cucchi is not capable of translating between a gripping initial position and a final ungripping position, as is the carriage recited in claim 1.

Turning now more particularly to Cucchi, the reference teaches a double-pusher bar feeder including a guiding means 14 and a pusher 15. The guiding means 14 includes opposed jaws 14A and 14B for guiding a bar 11 towards and along a spindle 12. Col. 3, lines 60-67. The pusher 15 is disposed on a channel member 16 and serves to push the bar 11 through the guiding means 14 toward the spindle, as shown in the series of Figures 1-3. That is, the reference teaches positioning the channel member 16 with pusher 15 under the bar 11 and engaging the bar with the pusher and pushing the bar so it slides along the channel member, through the guide means, and into the spindle.

The double-pusher bar feeder of Cucchi further includes a second bar pusher 26 which is capable of being positioned as shown in Figures 4-6 to further push the bar 11 into the spindle subsequent to the pushing action of the pusher 15 discussed immediately above. Col. 3, lines 35-52.

This teaching of Cucchi is clearly contrary to the recitation in Applicant's claim 1. Namely, the reference does not teach or suggest a guiding mechanism having supporting elements mounted slidably thereon to support a bar, as recited in claim 1. As mentioned above, the guide means 14 of Cucchi is a pair of opposed jaws 14a and 14b. The jaws taught by the reference do not include supporting elements and, further, the jaws clearly do not include supporting elements which are mounted slidably thereon. Instead, the jaws are two moveable members which essentially act as a collar through which the bar 11 is guided to the spindle.

To the contrary, claim 1 recites a guiding mechanism whereon supporting elements are slidable. This element is shown in one exemplary embodiment in Figures 1-7 as rods 4 and 5 having mounted slidably thereon supports 22, 23. This limitation is clearly not taught or suggested by Cucchi.

Additionally, Cucchi does not teach or suggest a guiding mechanism having a carriage provided with grip elements for a bar, the carriage being mounted slidably on guiding mechanism, as recited in claim 1. The guide means 14 of Cucchi clearly does not include a carriage slidably mounted thereon with grip elements. The "carriage" referred to by the Examiner in the outstanding Action is actually a pusher 15 engaged on a channel member 16, as discussed above. The pusher 15 and channel member 16 are not slidably mounted on the guide means 14 and, further, do not include grip elements.

This teaching of Cucchi is contrary to claim 1 which recites a guiding mechanism having a carriage slidably arranged thereon, the carriage being provided with grip elements. This limitation is exemplified, in one embodiment, as shown in Figures 1-7, as rods 4 and 5 having slidably disposed thereon the carriage 6 provided with grip elements 11 and 14. This element, as described and recited, is clearly not taught or suggested by the Cucchi reference.

Still further, Cucchi does not teach or suggest a carriage being actuated between an initial position, where grip elements are actuated so as to grip a bar deposited on a supporting element, and a final position, where the bar is released by the grip elements, as recited in claim 1. As mentioned, the pusher 15 and channel member 16 of the reference do not include, in any respect, grip elements as recited by Applicant. Moreover, Cucchi does not teach or suggest depositing a bar on supports, the supports being slidably arranged on the carriage, as recited in claim 1. See above discussion. Thus, the pusher and channel member of Cucchi are incapable of being actuated between an initial position, where grip elements are actuated so as to grip a bar deposited on a supporting element, and a final position, where the bar is released by the grip elements, as recited by Applicant. Clearly, this limitation is not taught or suggested by the reference.

As mentioned, the Examiner relies upon the Azuma reference for a teaching of Applicant's grip elements. However, this reference does not teach or suggest the grip elements of claim 1 which are recited as being mounted upon a slidably translatable carriage and are actuated so as to grip and release a bar.

Turning now particularly to Azuma, the reference teaches an automatic bar feeding apparatus including a bar-clamping mechanism which cooperates with a pusher rod. The clamping mechanism holds the bar material while the pusher rod is advanced by a motor and chain drive to forcibly connect itself with the bar material, the clamping mechanism then being opened to allow the pusher rod to advance the bar. Col. 1, lines 34-39. The clamping mechanism, as shown in Figure 5, includes clamps 59 and 61 fixably mounted on the automatic bar feeding apparatus at points 69 and 71, respectively. The clamps are pivoted about points 69 and 71 by a cam plate 57 and crank link mechanism 67, 73, 75, 77, 79 to grip and release a bar 23. Col. 2, lines 43-50. In operation, the clamps 59 and 61 grip and firmly hold the bar 23 while a pusher rod 21 is

advanced toward the end of the bar to contact and forcibly engage therewith. Col. 2, lines 64-71. After this engagement, the clamps 59 and 61 release the bar allowing the bar and pusher rod to be advanced by gravitational force. Col. 3, lines 1-5.

Accordingly, Azuma does not teach or suggest grip elements provided on a carriage slidably arranged on a guide mechanism to allow translation of the grip elements within the device for advancement of bars nor does Azuma not teach or suggest the grip elements on the slidable carriage occupying an initial gripping position and then a final ungripping position, as recited in claim 1.

These limitations of Applicant's invention are shown in one exemplary embodiment in Figures 1-7 as grip elements 11 and 14 mounted on the carriage 6, the carriage being slidably disposed on rods 4 and 5 and capable of translating along the rods between uprights 2 and 3 to arrange the grip elements at an initial gripping position and a final ungripping position.

This teaching of Applicant's invention is simply not found in the Azuma reference. As mentioned, Azuma teaches fixed, non-translatable clamps 59 and 61 mounted on the automatic bar feeding apparatus at and pivotable about points 69 and 71. The clamps of Azuma are not mounted on a slidably translatable carriage and, thus, are not capable of an initial gripping position and a final different ungripping position, as recited in claim 1.

Accordingly, the Cucchi and Azuma references, singularly or in combination, do not teach or suggest all of the limitations of claim 1. Particularly, the references at least do not teach or suggest a guiding mechanism whereon supporting elements to support a bar and a carriage provided with grip elements for the bar, are slidable, the carriage being actuated between an initial position where the grip elements are actuated so as to grip the bar deposited on the supporting element and a final position where the bar is released by the grip elements, as set forth by Applicant in claim 1. Thus, prima facie obviousness does not exist with respect to claim 1 over Cucchi in view of Azuma. Reconsideration and withdrawal of the obviousness rejection of claim 1 is respectfully requested.

Claim 2 depends from what is submitted to be an allowable claim 1. Thus, claim 2 is allowable. Reconsideration and withdrawal of the obviousness rejection of claim 2 is also requested.

Claim 8 recites a device for the advancement of bars including, among other elements, a carriage operatively associated with a first guide, the carriage having grip elements for a bar to be advanced and being slidably actuated between an initial position where the grip elements are actuated to grip the bar deposited on the guide and a final position where the bar is released by the grip elements. Applicant submits that at least these limitations of claim 8 are not taught or suggested by the Cucchi or Azuma references, singularly or in combination and thus the outstanding obviousness rejection may not be maintained.

As discussed in detail above with respect to the obviousness rejection of claim 1, Cucchi does not teach or suggest a carriage having grip elements for a bar to be advanced, the carriage being operatively associated with a first guide so as to be slidably actuated between an initial gripping position and a final ungripping position. Referring to Figures 1-6 of the reference, there is clearly no operative association between the pusher 15 and the guide means 14 allowing slidable translation of the former with respect to the latter.

Also discussed in detail above, the clamping mechanism of Azuma is not analogous to the grip elements of the present invention as recited in claim 1 as well as in claim 8. That is, Azuma does not teach or suggest grip elements mounted on a carriage operatively associated and slidably translatable with respect to a first guide such that the grip elements are actuatable between an initial gripping position and a final ungripping position, as set forth in claim 8.

Accordingly, the Cucchi and Azuma references, singularly or in combination, do not teach or suggest all of the limitations of claim 8. Thus, prima facie obviousness does not exist with respect to claim 8 over Cucchi in view of Azuma. Reconsideration and withdrawal of the obviousness rejection of claim 8 is respectfully requested.

Claims 9-11 and 15-18 depend from what is submitted to be an allowable claim 8. Thus, claims 9-11 and 15-18 are allowable. Reconsideration and withdrawal of the obviousness rejection of claims 9-11 and 15-18 is also requested.

Claim 25 depends from claim 19 and recites a device for the advancement of bars including, among other elements, a carriage and a guide operatively associated with the carriage, the carriage having grip elements and being slidably actuated between an initial

position where the grip elements are actuated so as to grip the bar deposited thereon and a final position where the bar is released by the grip elements.

As discussed in detail herein, the Cucchi and Azuma references, singularly or in combination, do not teach or suggest such elements. (See above discussion with respect to the obviousness rejections of claims 1 and 8.) Accordingly, prima facie obviousness does not exist with respect to claim 25 over Cucchi in view of Azuma. Reconsideration and withdrawal of the obviousness rejection of claim 25 is requested.

Claim 26 depends from claim 25 and, thus, is also not rendered obvious by the relied upon references. Reconsideration and withdrawal of the outstanding obviousness rejection of claim 26 is requested.

Claim 27 recites a device for advancement of bars including a carriage having grip elements for a bar to be advanced, the carriage being slidable so as to advance the bar. As discussed in detail herein. The Cucchi and Azuma references do not teach or suggest a slidable carriage having grip elements to grip and slidably advance a bar deposited thereon. Thus, in not teaching or suggesting all of the claimed limitations, the references do not render obvious claim 27. Accordingly, claims 28-31 which variously depend from claim 27 are not rendered obvious by the relied upon references. Reconsideration and withdrawal of the outstanding obviousness rejections of claims 27-31 is respectfully requested.

Claims 3, 12, 22, and 32 are rejected under 35 U.S.C. §103(a) as being obvious over Cucchi in view Azuma and in further view of French Patent No. 541,588 (herein, '588).

Claims 3, 12, 22, and 32 variously depend from what has been demonstrated herein to be allowable independent claims 1, 8, 19, and 27. Thus, claims 3, 12, 22, and 32 include all of the limitations of allowable claims 1, 8, 19, and 27, respectively, and further include additional limitations. Accordingly, claims 3, 12, 22, and 32 are allowable over the cited references.

Notwithstanding the foregoing, the '588 reference cited by the Examiner does not remedy any of the deficiencies of the Cucchi and Azuma references with respect to the limitations of claims 1, 8, 19, and 27. That is, '588 discloses a fixed clamping mechanism and does not teach or suggest a guide mechanism having slidably mounted

thereon a carriage with grip elements for a gripping a bar and supporting elements for supporting the bar, the carriage being slidably translatable between an initial gripping position and a final ungripping position, as variously recited in allowable claims 1, 8, 19, and 27.

Thus, the relied upon references, namely the Cucchi, Azuma, and '588 references, fail to teach or suggest all of the limitations of claims 3, 12, 22, and 32. Accordingly, claims 3, 12, 22, and 32 are not anticipated nor rendered obvious by the references. Reconsideration and withdrawal of the outstanding obviousness rejections is requested.

Allowable Subject Matter

Applicant graciously acknowledges the Examiner's indication at paragraph eleven of the Office Action that claims 4-7, 13, 14, 23, 24, 33, and 34 would be allowable if rewritten to overcome any outstanding rejections under 35 U.S.C. §112 and to include all of the limitations of the base claims and any intervening claims. Applicant submits that 4-7, 13, 14, 23, 24, 33, and 34 are now in condition for allowance as variously depending from allowable base claims 1, 8, 19, and 27 and as complying with the provisions of §112 per the present amendments and remarks. Allowance of claims 4-7, 13, 14, 23, 24, 33, and 34 is respectfully requested.

Notwithstanding the foregoing, Applicant reserves the right to place in independent form claims 4-7, 13, 14, 23, 24, 33, and 34, as suggested by the Examiner to obtain allowance, in the event that this Response is not deemed to place these claims in condition for allowance.

Conclusion

Claims 1-34 comply with the provisions of 35 U.S.C. §112 and, further, are not anticipated nor rendered obvious by the cited references. The reissue application and declaration are proper and the drawings comply with the Statute and Code.

The foregoing amendments and remarks fully comply with the Office Action and that the claims, as amended, are now allowable to Applicant. Thus, reconsideration of the application, allowance thereof, and passage to issue are respectfully requested.

The Examiner is invited to contact Applicant's attorney at the below-listed telephone number regarding this Response or otherwise concerning the present application.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant's attorneys.

Respectfully submitted,
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